

**REMARKS**

No amendments have been made. Accordingly, claims 1-21 and 23-25 remain presently pending. Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested.

Applicant appreciates the consideration of the Information Disclosure Statement (IDS) filed on January 9, 2006. However, Applicant respectfully notes that the Examiner did not initial the non-patent reference N. SAMOTO ET AL., Sub-0.1-um T-Shaped Gate Fabrication Technology Using Mixing-Layer Sidewalls in a Double-Layer Resist System, J. Vac. Sci Technology, American Vacuum Society, Vol. 12 ( No. 6), pp. 3673-3676, (November/December 1994) referenced on the PTO-1449. Enclosed is a new PTO-1449 listing only that reference, along with a copy of the original IDS filed on January 9, 2006 and copy of the stamped receipt therefor. The Examiner is respectfully requested to initial the reference and sign and date the PTO-1449 and return a copy with the next Office Action in accordance with MPEP §609.

Claims 1-5, 10, 11, 12, 14, 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,543,253 to Park et al. ("Park"). Applicant traverses for at least the following reasons.

Applicant respectfully submits that the cited portions of Park fail to disclose or render obvious a device manufacturing method comprising, *inter alia*, providing a first layer of electromagnetic radiation sensitive material on said substrate; providing a second layer of electromagnetic radiation sensitive material on said first layer of radiation sensitive material, the first and second layers of electromagnetic radiation sensitive material having a same tonality, said second layer of radiation sensitive material being of a different material than said first layer of radiation sensitive material, said first layer of radiation sensitive material having a dose size of at least approximately 1.5 times the magnitude of a dose size of said second layer of radiation sensitive material; providing a beam of electromagnetic radiation using an illumination system; imparting said beam of radiation with a desired pattern in its cross-section by employing a patterning device; and projecting said patterned beam of radiation onto a target portion of said substrate to expose both said first and second layers of radiation sensitive material, as recited in claim 1.

For example, the cited portions of Park disclose a method for forming T-shaped gate structures using electron beam lithography. *See* Park, col. 2, lines 59-61. Applicant submits that an electron beam is not a beam of electromagnetic radiation as recited in claim 1. *See, e.g.,* Applicant's specification, paragraphs [0010] and [0019]. Moreover, the resists in the cited portions of Park are not sensitive to electromagnetic radiation as recited in claim 1 but rather are electron beam sensitive. Applicant submits that the cited portions of Park are merely directed to a method for forming T-gates that was previously discussed by Applicant in the Description of Related Art. *See, e.g.,* Applicant's specification, paragraph [0006] (disclosing forming T-gates by an electron beam process).

Further, the cited portions of Park make no mention or suggestion of imparting the electron beam of Figures 3A-F of Park with a desired pattern in its cross-section by employing a patterning device. Indeed, the cited portions of Park fail to disclose or teach any structure equivalent to or analogous to the claimed patterning device for the electron beam with respect to the exposure process of Figures 3A-F of Park. Rather, the cited portions of Park merely disclose an electron beam 34 having a predetermined current density is scanned upon the resists. *See* Park, col. 2, lines 3-7.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the cited portions of Park fail to disclose or render obvious each and every feature recited by claim 1. Claims 2-5, 10, 11, 12, 14, 15 and 24 depend respectively from claim 1 and are, therefore, patentable for at least the same reasons provided above related to claim 1, and for the additional features recited therein. Thus, Applicant respectfully requests that the rejections of claims 1-5, 10, 11, 12, 14, 15 and 24 under 35 U.S.C. §103(a) over Park should be withdrawn and the claims be allowed.

Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Park in view of U.S. Patent Application Publication No. 2004/0056304 to Ahmed et al. ("Ahmed"). Applicant traverses this rejection. Claim 23 was also rejected under 35 U.S.C. §103(a) as being unpatentable over Park in view of U.S. Patent Application Publication No. 2002/0034872 to Kazama et al. ("Kazama"). Applicant traverses these rejections for at least the following reasons.

As discussed above, the cite portions of Park fail to disclose or render obvious each and every feature of claim 1.

Further, Applicant submits that the cited portions of Ahmed and Kazama do not overcome the shortcomings of the cited portions of Park. For example, the cited portions of

Ahmed and Kazama were merely cited by the Office Action for their respective teachings regarding substrate materials.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the cited portions of Park, Ahmed, Kazama, or a proper combination thereof, fail to disclose or render obvious each and every feature recited by claim 1. Claim 23 depends from claim 1 and is, therefore, patentable for at least the same reasons provided above related to claim 1, and for the additional features recited therein. Thus, Applicant respectfully requests that the rejection of claim 23 under 35 U.S.C. § 103(a) over Park in view of either Ahmed or Kazama should be withdrawn and the claim be allowed.

All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance, and a Notice to that effect is earnestly solicited. If the Examiner has any questions or suggestions that would facilitate the prosecution of the present application, he is encouraged to contact the undersigned at the below-listed telephone number.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

  
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